UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
EMERGENCY RESPONSE BRANCH
9311 GROH ROAD, ROOM 216
GROSSE ILE, MI 48138-1697

JUL 02 1998

REPLY TO ATTENTION OF:

MEMORANDUM

SUBJECT: ACTION MEMORANDUM - Determination of Threat to Public Health, Welfare, or the Environment at the Michigan Chrome and Chemical Site, Detroit, Wayne County, Michigan (Site ID #B550)

FROM: P.C. Lall, On-Scene Coordinator
Emergency Response Branch - Section 1

TO: William E. Muno, Director
Superfund Division

THRU: for Richard C. Karl, Chief
Emergency Response Branch

I. PURPOSE

The purpose of this memorandum is to document the determination of an imminent and substantial threat to public health and the environment posed by the presence of contaminated soils, piles of metallic plating wastes, plating sludges and laboratory chemicals at the inactive and badly vandalized Michigan Chrome and Chemical (MCC) Company Site in Detroit, Wayne County, Michigan. Drums containing corrosive materials are also present in the open yard at the facility.

The actions proposed herein will mitigate site conditions by investigating the extent of surface contamination at the site and by implementing a removal action. It is anticipated that these actions will be performed by the potentially responsible parties (PRPs) pursuant to an Administrative Order on Consent (AOC). The fact that releases of hazardous substances have already occurred and are likely to continue until removal activities have been completed requires that on-site activities be considered time critical.

The MCC site is not on the National Priorities List (NPL).

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID #MID 005 378 161

A. Physical Location and Description

The MCC Site is located at 8615-35 Grinnell Avenue, Detroit, Wayne County, Michigan 48213 (Latitude 42°23'50"N and Longitude 83°00'5"W). The site is approximately 10 acres and consists of two separate properties located in a mixed residential/industrial area. The properties are bordered to the south by Grinnell Street, to the east by industrial operations, to the north by the Detroit Terminal Railroad tracks, and to the west by Erwin Street. The closest residences are south of Grinnell Street, approximately 50 yards from the site. Approximately 16,570 persons live within a 1-mile radius of the site, 14 percent of which are black and 26 percent are hispanics. Median household income is approximately $13,100. Houses in the area are 45.8 percent owner occupied.

The area surrounding the site meets the category one Environmental Justice criteria as employed by the United States Environmental Protection Agency's (U.S. EPA) Superfund Program.

B. Site Background

The site owner-operator is Mr. Robert Huber. MCC currently is not an operating facility. During the operating years, the company was an industrial electroplating and coating facility, and the process produced an array of hazardous waste streams that included waste cyanide sludge, metal hydroxide sludge, and various organic solvents.

The site was referred to the U.S. EPA, Emergency Response Section 1, by the City of Detroit, Department of Environmental Affairs, on January 6, 1998. On February 5, 1998, the OSC, along with members of the START team, conducted a reconnaissance walk through on site. Access was provided by the property owner, Mr. Huber, who, along with his attorney and consultants, also accompanied the U.S. EPA group for a site walk through.

Piles of metallic plating solids were observed on the floors in various locations in the building. The concrete floor in the cyanide treatment area was severely etched by corrosive chemicals. Long trenches connecting various process areas were full of sludge and sediment. Plating wastewater pretreatment tanks were full of liquid. Containers of chemicals and paints of various sizes were scattered around throughout the buildings and the laboratories. Many containers had labels indicating corrosive materials, flammables, and mercury as the contents. Outside the building, in an uncovered fenced area, were hundreds of 55-gallon drums, vats, and tanks containing various hazardous and nonhazardous materials.

Two solid samples from floors and a liquid sample from the wastewater tanks were taken. These samples were split with Environmental Consulting and Technology, Inc., consultant to MCC. Analytical data revealed high levels of heavy metals and cyanide in the solid samples. Toxicity Characteristic Leachate Procedure (TCLP) analysis indicated the leachate cadmium concentration is three times the Resource Conservation and Recovery Act (RCRA) levels allowed in the soils. The cyanide concentration is almost twice the level allowed based upon the direct contact exposure scenario.

III. THREATS TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at the MCC Site present an imminent and substantial threat to public health, welfare, and the environment and meet the criteria for a removal action provided for in the National Contingency Plan (NCP), Section 300.415, paragraph (b)(2), specifically:

a) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;

Numerous containers, potentially containing hazardous materials and hazardous wastes, are present on site. Site soils have high levels of heavy metals and cyanides. The site is easily accessible and plenty of evidence of trespassing activity was evident. Dead rats were observed in the open trenches.

b) Hazardous substances, pollutants, or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;

The outdoor storage area contained numerous containers of all sizes and types (vats, drums, tanks, small containers). Most of the containers were empty and unlabeled. A few containers held varying amounts of liquids. Drum labels observed included hydrogen peroxide 35 percent, irilac 1012 (a protective coating for metals), hydrocyanic acid salt and caustic soda. This area also contained bags of powder and debris. Some of these drums and vats are open and exposed, subject to leakage as well as subject to dermal contact when accessed by humans or animals. Unlabeled containers with incompatible materials may be stored near each other and may react violently if mixed inadvertently. Continued vandalism and uncontrolled destructive activity at the site could result in the release of such contaminants to the soil (surface and subsurface) and the groundwater at the site.

c) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;

Analytical results indicated that surface soils contained elevated levels of heavy metals (copper, chromium, cadmium, and zinc up to 900 mg/kg) and cyanide (14,000 mg/kg). TCLP analysis indicated the leachate cadmium concentration is three times the RCRA levels allowed in the

soils. The cyanide concentration is almost twice the level allowed based upon the direct contact exposure scenario. There were only two samples taken; however, a complete extent of contamination of the surface soils is necessary to identify all the contaminated areas. Surface trenches are full of sludge potentially from plating processes. This sludge needs to be analyzed and removed. Tracking of contaminated soils, sludges as well as release of contaminants from soils to groundwater could potentially have occurred and would continue to occur unless the surface contamination is addressed.

d) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

There are leaks in sections of the roof so rainwater can enter the contaminated areas causing migration of the contaminants. The drums and other containers stored outside the buildings are exposed to the elements and are subject to deterioration.

IV. ENDANGERMENT DETERMINATION

Given the site conditions, the nature of the suspected hazardous substances on site, and the potential exposure pathways described in Sections II and III above, actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

The OSC proposes that the following actions be taken by the PRPs to mitigate threats posed by the presence of hazardous substances at the MCC site:

1) Develop and implement a site health and safety plan and an emergency contingency plan;

2) Implement appropriate site security measures;

3) Conduct comprehensive site investigation activities, including site sampling and analysis necessary to fully characterize the nature and extent of contamination;

4) Identify, package and dispose of all hazardous materials and wastes, including contaminated soils and lab containers from the entire site in accordance with Federal, State, and local regulations; and

5) Conduct post cleanup sampling and analysis to document completeness of the removal action.

All hazardous substances, pollutants, or contaminants removed off site pursuant to this removal action for treatment, storage, and disposal shall be treated, stored, or disposed of at a facility in compliance with the U.S. EPA Off-Site Rule, 40 CFR § 300.440, 58 Federal Register 49215 (September 22, 1993).

The OSC has initiated consideration of post-removal site control consistent with the provisions of Section 300.415 (l) of the NCP. It is anticipated that any post-removal site controls will be undertaken by the PRPs.

The response actions described in this memorandum directly address the actual or threatened release at the site of a hazardous substance, or of a pollutant, or of a contaminant which may pose an imminent and substantial endangerment to public health or welfare or to the environment. These actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed. It is anticipated that time-critical removal activities will take approximately 100 calendar days to complete.

Applicable or Relevant and Appropriate Requirements

All applicable, relevant, and appropriate requirements (ARARs) will be complied with to the extent practicable. A letter was sent to Mr. Jon Russell of the Michigan Department of Environmental Quality (MDEQ) on April 28, 1998, requesting that the MDEQ identify State ARARs. Any State ARARs identified in a timely manner for this removal action will be complied with to the extent practicable.

VII. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Continued risk to public health and the environment will result if no action or delayed action ensues.

VIII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this site.

IX. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this site is contained in the Enforcement Confidential Addendum.

X. RECOMMENDATION

This decision document represents the selected removal action for the MCC Site developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based upon the Administrative Record for the site. Conditions at the site meet the NCP Section 300.415(b)(2) criteria for a removal and I recommend your approval of the proposed removal action. You may indicate your decision by signing below.

APPROVE: W. E. Muno DATE: 7/2/98
Director, Superfund Division

DISAPPROVE: _____ DATE: _____
Director, Superfund Division

Enforcement Addendum
Attachment
1. Administrative Record Index

cc: K. Mould, U.S. EPA, 5202-G
M. Chezic, U.S. Dept. of the Interior, **w/o Enf. Addendum**
A. Howard, MDEQ, **w/o Enf. Addendum**
R. Harding, MDEQ, **w/o Enf. Addendum**
F. Kelley, MI Dept. of Attorney General, **w/o Enf. Addendum**

BCC PAGE

HAS BEEN REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ENFORCEMENT ADDENDUM
MICHIGAN CHROME AND CHEMICAL
APRIL 1998
1 PAGE

HAS BEEN REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

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ATTACHMENT 1

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
MICHIGAN CHROME AND CHEMICAL SITE
DETROIT, WAYNE COUNTY, MICHIGAN

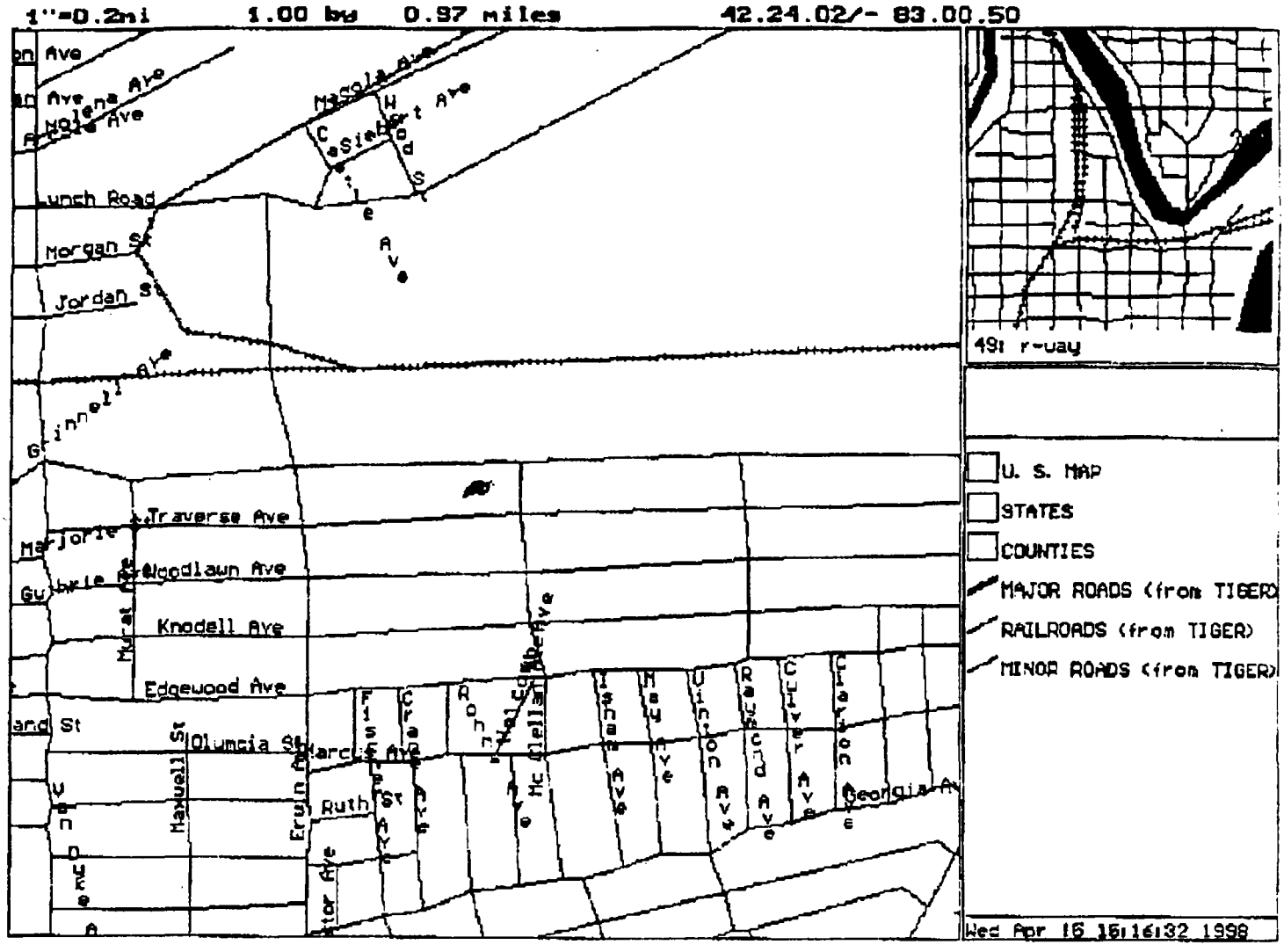
ORIGINAL
MAY 7, 1998

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	01/15/98	Powers, R., City of Detroit	El-Zein, J., U.S. EPA	FAX Transmission re: Referral of the Michigan Chrome and Chemical Site to U.S. EPA	4
2	04/08/98	Ecology and Environment, Inc.	U.S. EPA	*Site Assessment Report* for the Michigan Chrome and Chemical Site	16
3	04/28/98	Lall, P., U.S. EPA	Russell, J., MDEQ	Letter re: U.S. EPA's Request for Michigan ARARs for the Michigan Chrome and Chemical Site	1
4	00/00/00	Lall, P., U.S. EPA	Muno, W., U.S. EPA	Action Memorandum: Determination of Threat to Public Health, Welfare or the Environment at the Michigan Chrome and Chemical Site **(PENDING)**	

POPULATION SUMMARY

LOCATION	:	1.0 mi. radius at 42.300143, -83.110633
# BLOCK GROUPS INCLUDED	:	21
NUMBER OF PERSONS	:	16572
NUMBER OF FAMILIES	:	3970
NUMBER OF HOUSEHOLDS	:	5701
MEDIAN (EST.) HOUSEHOLD INCOME	:	13118
AGE 0 THRU 4	:	1851
AGE 5 THRU 9	:	1506
AGE 10 THRU 19	:	2618
AGE 20 THRU 49	:	7149
AGE 50 THRU 64	:	1842
AGE 65 AND OVER	:	1606
WHITE	:	11141
BLACK	:	2313
INDIAN	:	205
ASIAN	:	100
OTHER RACE	:	2813
HISPANIC	:	4375
OWNER OCCUPIED	:	2610
RENTER OCCUPIED	:	3091
PERCENT AGE 0 THRU 4	:	11.2
PERCENT AGE 5 THRU 9	:	9.1
PERCENT AGE 10 THRU 19	:	15.8
PERCENT AGE 20 THRU 49	:	43.1
PERCENT AGE 50 THRU 64	:	11.1
PERCENT AGE 65 AND OVER	:	9.7
PERCENT WHITE	:	67.2
PERCENT BLACK	:	14.0
PERCENT INDIAN	:	1.2
PERCENT ASIAN	:	0.6
PERCENT HISPANIC	:	26.4
PERCENT OTHER RACE	:	17.0
PERCENT OWNER OCCUPIED	:	45.8
PERCENT RENTER OCCUPIED	:	54.2

1"=0.4mi 2.00 by 1.84 miles 42.24.02/- 83.00.50


1"=0.2mi
1.00 by 0.97 miles
42.24.02/- 83.00.50
Lynch Road
Morgan St
Jordan St
Traverse Ave
Woodlawn Ave
Knodell Ave
Edgewood Ave
Olumcia St
Ruth St
Georgia Ave
U. S. MAP
STATES
COUNTIES
MAJOR ROADS (from TIGER)
RAILROADS (from TIGER)
MINOR ROADS (from TIGER)
Wed Apr 16 16:16:32 1998